

SEQUENCE LISTING

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 Falvia Spirito
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 Keith Linder

<120> ISOLATION OF THE LAMININ Y2 GENE IN
 HORSES AND ITS USE IN DIAGNOSING JUNCTIONAL EPIDERMOLYSIS
 BULLOSA

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Phe Ser Leu Leu Leu Pro Ala Ala Arg Ala Thr Ser Gly Arg Glu Val	
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Val Thr Gly Asp Arg Cys Asp Arg Cys Leu Pro Gly Phe His Thr Leu	
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Phe Cys Tyr Gly His Ser Ala Ser Cys His Ser Ser Gly Asp Tyr Ser	
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Ile Arg Ala Thr Tyr Gly Glu Tyr Ser Thr Gly Tyr Ile Asp Asn Val	
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Tyr	Val	Gly	Pro	Asn	Gly	Phe	Lys	Ser	Leu	Ala	Gln	Glu	Ala	Thr	Arg	
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Asp Gly Ile Leu His Leu Ile Asp Gln Pro Gly Ser Val Asp Glu Glu	
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Cys Glu Arg Cys Lys Ala Gly Phe Tyr Arg Gln Arg Glu Arg Asp Arg
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Asp Asn Ser Gly Arg Cys Ser Cys Lys Pro Gly Val Thr Gly Asp Arg
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Cys Asp Arg Cys Leu Pro Gly Phe His Thr Leu Thr Asp Ala Gly Cys
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Ala Gln Asp Gln Arg Leu Leu Asp Ser Lys Cys Asp Cys Asp Pro Ala
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Gly Ile Ser Gly Pro Cys Asp Ser Gly Arg Cys Val Cys Lys Pro Ala
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Val Thr Gly Glu Arg Cys Asp Arg Cys Arg Pro Gly Tyr Tyr His Leu
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 Ser Gln Lys Val Ala Gly Ala Ser Asp Lys Thr Lys Gln Ala Glu Ala
 980 985 990
 Ala Leu Gly Ser Ala Ala Ala Asp Ala Gln Arg Ala Lys Asn Ala Ala
 995 1000 1005
 Arg Glu Ala Leu Glu Ile Ser Gly Lys Ile Glu Gln Glu Ile Gly Gly
 1010 1015 1020
 Leu Asn Leu Glu Ala Asn Val Thr Ala Asp Gly Ala Leu Ala Met Glu
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 Lys Gly Leu Ala Thr Leu Lys Ser Glu Met Arg Glu Val Glu Gly Glu
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 Leu Ser Arg Lys Glu Gln Glu Phe Asp Met Asp Met Asp Ala Val Gln
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 Met Val Ile Ala Glu Ala Gln Arg Val Glu Asn Arg Ala Lys Asn Ala
 1075 1080 1085
 Gly Val Thr Ile Gln Asp Thr Leu Asn Thr Leu Asp Gly Ile Leu His
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 Leu Ile Asp Gln Pro Gly Ser Val Asp Glu Glu Arg Leu Ile Leu Leu
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 Glu Gln Lys Leu Phe Arg Ala Lys Thr Gln Ile Asn Ser Gln Leu Arg
 1125 1130 1135
 Pro Leu Met Ser Glu Leu Glu Glu Arg Ala His Arg Gln Lys Gly His
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 Leu Arg Phe Leu Glu Thr Ser Ile Asp Gly Ile Leu Ala Asp Val Lys
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 Lys Ser Arg Gln Cys Ile Phe Asp Arg Glu Leu His Arg Gln Thr Gly
 35 40 45
 Asn Gly Phe Arg Cys Leu Asn Cys Asn Asp Asn Thr Asp Gly Ile His
 50 55 60
 Cys Glu Lys Cys Lys Asn Gly Phe Tyr Arg His Arg Glu Arg Asp Arg
 65 70 75 80
 Cys Leu Pro Cys Asn Cys Asn Ser Lys Gly Ser Leu Ser Ala Arg Cys
 85 90 95
 Asp Asn Ser Gly Arg Cys Ser Cys Lys Pro Gly Val Thr Gly Ala Arg
 100 105 110
 Cys Asp Arg Cys Leu Pro Gly Phe His Met Leu Thr Asp Ala Gly Cys
 115 120 125
 Thr Gln Asp Gln Arg Leu Leu Asp Ser Lys Cys Asp Cys Asp Pro Ala
 130 135 140
 Gly Ile Ala Gly Pro Cys Asp Ala Gly Arg Cys Val Cys Lys Pro Ala
 145 150 155 160
 Val Thr Gly Glu Arg Cys Asp Arg Cys Arg Ser Gly Tyr Tyr Asn Leu
 165 170 175
 Asp Gly Gly Asn Pro Glu Gly Cys Thr Gln Cys Phe Cys Tyr Gly His
 180 185 190
 Ser Ala Ser Cys Arg Ser Ser Ala Glu Tyr Ser Val His Lys Ile Thr
 195 200 205
 Ser Thr Phe His Gln Asp Val Asp Gly Trp Lys Ala Val Gln Arg Asn
 210 215 220
 Gly Ser Pro Ala Lys Leu Gln Trp Ser Gln Arg His Gln Asp Val Phe
 225 230 235 240
 Ser Ser Ala Gln Arg Leu Asp Pro Val Tyr Phe Val Ala Pro Ala Lys
 245 250 255
 Phe Leu Gly Asn Gln Gln Val Ser Tyr Gly Gln Ser Leu Ser Phe Asp
 260 265 270
 Tyr Arg Val Asp Arg Gly Gly Arg His Pro Ser Ala His Asp Val Ile
 275 280 285
 Leu Glu Gly Ala Gly Leu Arg Ile Thr Ala Pro Leu Met Pro Leu Gly
 290 295 300
 Lys Thr Leu Pro Cys Gly Leu Thr Lys Thr Tyr Thr Phe Arg Leu Asn

305					310					315				320
Glu	His	Pro	Ser	Asn	Asn	Trp	Ser	Pro	Gln	Leu	Ser	Tyr	Phe	Glu
				325					330					335
Arg	Arg	Leu	Leu	Arg	Asn	Leu	Thr	Ala	Leu	Arg	Ile	Arg	Ala	Thr
				340				345					350	
Gly	Glu	Tyr	Ser	Thr	Gly	Tyr	Ile	Asp	Asn	Val	Thr	Leu	Ile	Ser
		355				360						365		
Arg	Pro	Val	Ser	Gly	Ala	Pro	Ala	Pro	Trp	Val	Glu	Gln	Cys	Ile
	370					375					380			
Pro	Val	Gly	Tyr	Lys	Gly	Gln	Phe	Cys	Gln	Asp	Cys	Ala	Ser	Gly
	385				390					395				400
Lys	Arg	Asp	Ser	Ala	Arg	Leu	Gly	Pro	Phe	Gly	Thr	Cys	Ile	Pro
				405					410					415
Asn	Cys	Gln	Gly	Gly	Gly	Ala	Cys	Asp	Pro	Asp	Thr	Gly	Asp	Cys
			420					425					430	
Ser	Gly	Asp	Glu	Asn	Pro	Asp	Ile	Glu	Cys	Ala	Asp	Cys	Pro	Ile
	435						440					445		
Phe	Tyr	Asn	Asp	Pro	His	Asp	Pro	Arg	Ser	Cys	Lys	Pro	Cys	Pro
	450					455					460			
His	Asn	Gly	Phe	Ser	Cys	Ser	Val	Met	Pro	Glu	Thr	Glu	Glu	Val
	465					470				475				480
Cys	Asn	Asn	Cys	Pro	Pro	Gly	Val	Thr	Gly	Ala	Arg	Cys	Glu	Leu
				485					490					495
Ala	Asp	Gly	Tyr	Phe	Gly	Asp	Pro	Phe	Gly	Glu	His	Gly	Pro	Val
			500					505				510		
Pro	Cys	Gln	Pro	Cys	Gln	Cys	Asn	Asn	Asn	Val	Asp	Pro	Ser	Ala
		515					520					525		
Gly	Asn	Cys	Asp	Arg	Leu	Thr	Gly	Arg	Cys	Leu	Lys	Cys	Ile	His
	530					535					540			
Thr	Ala	Gly	Ile	Tyr	Cys	Asp	Gln	Cys	Lys	Ala	Gly	Tyr	Phe	Gly
	545					550				555				560
Pro	Leu	Ala	Pro	Asn	Pro	Ala	Asp	Lys	Cys	Arg	Ala	Cys	Asn	Cys
				565				570						575
Pro	Met	Gly	Ser	Glu	Pro	Val	Gly	Cys	Arg	Ser	Asp	Gly	Thr	Cys
			580					585				590		
Cys	Lys	Pro	Gly	Phe	Gly	Gly	Pro	Asn	Cys	Glu	His	Gly	Ala	Phe
		595					600					605		
Cys	Pro	Ala	Cys	Tyr	Asn	Gln	Val	Lys	Ile	Gln	Met	Asp	Gln	Phe
	610					615					620			
Gln	Gln	Leu	Gln	Arg	Met	Glu	Ala	Leu	Ile	Ser	Lys	Ala	Gln	Gly
	625				630					635				640
Asp	Gly	Val	Val	Pro	Asp	Thr	Glu	Leu	Glu	Gly	Arg	Met	Gln	Gln
				645					650					655
Glu	Gln	Ala	Leu	Gln	Asp	Ile	Leu	Arg	Asp	Ala	Gln	Ile	Ser	Glu
			660					665					670	
Ala	Ser	Arg	Ser	Leu	Gly	Leu	Gln	Leu	Ala	Lys	Val	Arg	Ser	Gln
		675					680					685		
Asn	Ser	Tyr	Gln	Ser	Arg	Leu	Asp	Asp	Leu	Lys	Met	Thr	Val	Glu
	690					695					700			
Val	Arg	Ala	Leu	Gly	Ser	Gln	Tyr	Gln	Asn	Arg	Val	Arg	Asp	Thr
	705				710				715					720
Arg	Leu	Ile	Thr	Gln	Met	Gln	Leu	Ser	Leu	Ala	Glu	Ser	Glu	Ala
				725					730					735
Leu	Gly	Asn	Thr	Asn	Ile	Pro	Ala	Ser	Asp	His	Tyr	Val	Gly	Pro
		740						745					750	
Gly	Phe	Lys	Ser	Leu	Ala	Gln	Glu	Ala	Thr	Arg	Leu	Ala	Glu	Ser
		755					760					765		

Val	Glu	Ser	Ala	Ser	Asn	Met	Glu	Gln	Leu	Thr	Arg	Glu	Thr	Glu	Asp
770						775					780				
Tyr	Ser	Lys	Gln	Ala	Leu	Ser	Leu	Val	Arg	Lys	Ala	Leu	His	Glu	Gly
785					790					795					800
Val	Gly	Ser	Gly	Ser	Gly	Ser	Pro	Asp	Gly	Ala	Val	Val	Gln	Gly	Leu
				805					810					815	
Val	Glu	Lys	Leu	Glu	Lys	Thr	Lys	Ser	Leu	Ala	Gln	Gln	Leu	Thr	Arg
			820					825					830		
Glu	Ala	Thr	Gln	Ala	Glu	Ile	Glu	Ala	Asp	Arg	Ser	Tyr	Gln	His	Ser
		835					840					845			
Leu	Arg	Leu	Leu	Asp	Ser	Val	Ser	Arg	Leu	Gln	Gly	Val	Ser	Asp	Gln
	850					855					860				
Ser	Phe	Gln	Val	Glu	Glu	Ala	Lys	Arg	Ile	Lys	Gln	Lys	Ala	Asp	Ser
865					870					875					880
Leu	Ser	Thr	Leu	Val	Thr	Arg	His	Met	Asp	Glu	Phe	Lys	Arg	Thr	Gln
				885					890					895	
Lys	Asn	Leu	Gly	Asn	Trp	Lys	Glu	Glu	Ala	Gln	Gln	Leu	Leu	Gln	Asn
			900					905						910	
Gly	Lys	Ser	Gly	Arg	Glu	Lys	Ser	Asp	Gln	Leu	Leu	Ser	Arg	Ala	Asn
	915						920						925		
Leu	Ala	Lys	Ser	Arg	Ala	Gln	Glu	Ala	Leu	Ser	Met	Gly	Asn	Ala	Thr
	930					935					940				
Phe	Tyr	Glu	Val	Glu	Ser	Ile	Leu	Lys	Asn	Leu	Arg	Glu	Phe	Asp	Leu
945					950					955					960
Gln	Val	Asp	Asn	Arg	Lys	Ala	Glu	Ala	Glu	Glu	Ala	Met	Lys	Arg	Leu
				965					970					975	
Ser	Tyr	Ile	Ser	Gln	Lys	Val	Ser	Asp	Ala	Ser	Asp	Lys	Thr	Gln	Gln
			980					985					990		
Ala	Glu	Arg	Ala	Leu	Gly	Ser	Ala	Ala	Ala	Asp	Ala	Gln	Arg	Ala	Lys
	995						1000						1005		
Asn	Gly	Ala	Gly	Glu	Ala	Leu	Glu	Ile	Ser	Ser	Glu	Ile	Glu	Gln	Glu
	1010					1015					1020				
Ile	Gly	Ser	Leu	Asn	Leu	Glu	Ala	Asn	Val	Thr	Ala	Asp	Gly	Ala	Leu
	1025				1030					1035					1040
Ala	Met	Glu	Lys	Gly	Leu	Ala	Ser	Leu	Lys	Ser	Glu	Met	Arg	Glu	Val
				1045					1050					1055	
Glu	Gly	Glu	Leu	Glu	Arg	Lys	Glu	Leu	Glu	Phe	Asp	Thr	Asn	Met	Asp
		1060						1065					1070		
Ala	Val	Gln	Met	Val	Ile	Thr	Glu	Ala	Gln	Lys	Val	Asp	Thr	Arg	Ala
	1075						1080						1085		
Lys	Asn	Ala	Gly	Val	Thr	Ile	Gln	Asp	Thr	Leu	Asn	Thr	Leu	Asp	Gly
	1090					1095					1100				
Leu	Leu	His	Leu	Met	Asp	Gln	Pro	Leu	Ser	Val	Asp	Glu	Glu	Gly	Leu
1105					1110					1115					1120
Val	Leu	Leu	Glu	Gln	Lys	Leu	Ser	Arg	Ala	Lys	Thr	Gln	Ile	Asn	Ser
				1125					1130					1135	
Gln	Leu	Arg	Pro	Met	Met	Ser	Glu	Leu	Glu	Glu	Arg	Ala	Arg	Gln	Gln
			1140					1145					1150		
Arg	Gly	His	Leu	His	Leu	Leu	Glu	Thr	Ser	Ile	Asp	Gly	Ile	Leu	Ala
	1155						1160					1165			
Asp	Val	Lys	Asn	Leu	Glu	Asn	Ile	Arg	Asp	Asn	Leu	Pro	Pro	Gly	Cys
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Lys	Ser	Arg	Gln	Cys	Val	Phe	Asp	Gln	Glu	Leu	His	Arg	Gln	Ala	Gly
		35					40					45			
Ser	Gly	Phe	Arg	Cys	Leu	Asn	Cys	Asn	Asp	Asn	Thr	Ala	Gly	Val	His
	50					55					60				
Cys	Glu	Arg	Ser	Arg	Glu	Gly	Phe	Tyr	Gln	His	Gln	Ser	Lys	Ser	Arg
65					70				75						80
Cys	Leu	Pro	Cys	Asn	Cys	His	Ser	Lys	Gly	Ser	Leu	Ser	Ala	Gly	Cys
				85					90					95	
Asp	Asn	Ser	Gly	Gln	Cys	Arg	Cys	Lys	Pro	Gly	Val	Thr	Gly	Gln	Arg
			100					105					110		
Cys	Asp	Gln	Cys	Gln	Pro	Gly	Phe	His	Met	Leu	Thr	Asp	Ala	Gly	Cys
		115					120					125			
Thr	Arg	Asp	Gln	Gly	Gln	Leu	Asp	Ser	Lys	Cys	Asp	Cys	Asp	Pro	Ala
	130					135					140				
Gly	Ile	Ser	Gly	Pro	Cys	Asp	Ser	Gly	Arg	Cys	Val	Cys	Lys	Pro	Ala
145					150					155					160
Val	Thr	Gly	Glu	Arg	Cys	Asp	Arg	Cys	Arg	Pro	Arg	Asp	Tyr	His	Leu
				165					170					175	
Asp	Arg	Ala	Asn	Pro	Glu	Gly	Cys	Thr	Gln	Cys	Phe	Cys	Tyr	Gly	His
			180					185					190		
Ser	Ala	Ser	Cys	His	Ala	Ser	Ala	Asp	Phe	Ser	Val	His	Lys	Ile	Thr
		195					200					205			
Ser	Thr	Phe	Ser	Gln	Asp	Val	Asp	Gly	Trp	Lys	Ala	Val	Gln	Arg	Asn
	210				215						220				
Gly	Ala	Pro	Ala	Lys	Leu	His	Trp	Ser	Gln	Arg	His	Arg	Asp	Val	Phe
225					230					235					240
Ser	Ser	Ala	Arg	Arg	Ser	Asp	Pro	Val	Tyr	Phe	Val	Ala	Pro	Ala	Lys
				245					250					255	
Phe	Leu	Gly	Asn	Gln	Gln	Val	Ser	Tyr	Gly	Gln	Ser	Leu	Ser	Phe	Asp
			260					265					270		
Tyr	Arg	Val	Asp	Arg	Gly	Gly	Arg	Gln	Pro	Ser	Ala	Tyr	Asp	Val	Ile
		275					280					285			
Leu	Glu	Gly	Ala	Gly	Leu	Gln	Ile	Arg	Ala	Pro	Leu	Met	Ala	Pro	Gly
	290					295					300				
Lys	Thr	Leu	Pro	Cys	Gly	Ile	Thr	Lys	Thr	Tyr	Thr	Phe	Arg	Leu	Asn
305					310					315					320
Glu	His	Pro	Ser	Ser	His	Trp	Ser	Pro	Gln	Leu	Ser	Tyr	Phe	Glu	Tyr
				325					330					335	
Arg	Arg	Leu	Leu	Arg	Asn	Leu	Thr	Ala	Leu	Leu	Met	Ile	Arg	Ala	Thr
				340				345					350		
Tyr	Gly	Glu	Tyr	Ser	Thr	Gly	Tyr	Ile	Asp	Asn	Val	Thr	Leu	Val	Ser
		355					360					365			
Ala	Arg	Pro	Val	Leu	Gly	Ala	Pro	Ala	Pro	Trp	Val	Glu	Arg	Cys	Val
	370					375					380				
Cys	Leu	Leu	Gly	Tyr	Lys	Gly	Gln	Phe	Cys	Gln	Glu	Cys	Ala	Ser	Gly
385					390					395					400

Tyr Lys Arg Asp Ser Ala Arg Leu Gly Ala Phe Gly Ala Cys Val Pro
 405 410 415
 Cys Asn Cys Gln Gly Glu Gly Ala Cys Asp Pro Asp Thr Gly Asp Cys
 420 425 430
 Tyr Ser Gly Asp Glu Asn Pro Asp Ile Glu Cys Ala Asp Cys Pro Ile
 435 440 445
 Gly Phe Tyr Asn Asp Pro His Asp Pro Arg Ser Cys Lys Pro Cys Pro
 450 455 460
 Cys His Asn Gly Phe Ser Cys Ser Val Met Pro Glu Thr Glu Glu Val
 465 470 475 480
 Val Cys Asn Asn Cys Pro Pro Gly Val Thr Gly Ala Arg Cys Glu Leu
 485 490 495
 Cys Ala Asp Gly Phe Phe Gly Asp Pro Phe Gly Glu His Gly Pro Val
 500 505 510
 Arg Pro Cys Gln Arg Cys Gln Cys Asn Asn Asn Val Asp Pro Asn Ala
 515 520 525
 Ser Gly Asn Cys Asp Gln Leu Thr Gly Arg Cys Leu Lys Cys Ile Tyr
 530 535 540
 Asn Thr Ala Gly Val Tyr Cys Asp Gln Cys Lys Ala Gly Tyr Phe Gly
 545 550 555 560
 Asp Pro Leu Ala Pro Asn Pro Ala Asp Lys Cys Arg Ala Cys Asn Cys
 565 570 575
 Ser Pro Met Gly Ala Glu Pro Gly Glu Cys Arg Gly Asp Gly Ser Cys
 580 585 590
 Val Cys Lys Pro Gly Phe Gly Ala Phe Asn Cys Asp His Ala Ala Leu
 595 600 605
 Thr Ser Cys Pro Ala Cys Tyr Asn Gln Val Lys Ile Gln Met Asp Gln
 610 615 620
 Phe Thr Gln Gln Leu Gln Ser Leu Glu Ala Leu Val Ser Lys Ala Gln
 625 630 635 640
 Gly Gly Gly Gly Gly Gly Thr Val Pro Val Gln Leu Glu Gly Arg Ile
 645 650 655
 Glu Gln Ala Glu Gln Ala Leu Gln Asp Ile Leu Gly Glu Ala Gln Ile
 660 665 670
 Ser Glu Gly Ala Met Arg Ala Val Ala Val Arg Leu Ala Lys Ala Arg
 675 680 685
 Ser Gln Glu Asn Asp Tyr Lys Thr Arg Leu Asp Asp Leu Lys Met Thr
 690 695 700
 Ala Glu Arg Ile Arg Ala Leu Gly Ser Gln His Gln Asn Arg Val Gln
 705 710 715 720
 Asp Thr Ser Arg Leu Ile Ser Gln Met Arg Leu Ser Leu Ala Gly Ser
 725 730 735
 Glu Ala Leu Leu Glu Asn Thr Asn Ile His Ser Ser Glu His Tyr Val
 740 745 750
 Gly Pro Asn Asp Phe Lys Ser Leu Ala Gln Glu Ala Thr Arg Lys Ala
 755 760 765
 Asp Ser His Ala Glu Ser Ala Asn Ala Met Lys Gln Leu Ala Arg Glu
 770 775 780
 Thr Glu Asp Tyr Ser Lys Gln Ala Leu Ser Leu Ala Arg Lys Leu Leu
 785 790 795 800
 Ser Gly Gly Gly Gly Ser Gly Ser Trp Asp Ser Ser Val Val Gln Gly
 805 810 815
 Leu Met Gly Lys Leu Glu Lys Thr Lys Ser Leu Ser Gln Gln Leu Ser
 820 825 830
 Leu Glu Gly Thr Gln Ala Asp Ile Glu Ala Asp Arg Ser Tyr Gln His
 835 840 845
 Ser Leu Arg Leu Leu Asp Ser Ala Ser Gln Leu Gln Gly Val Ser Asp

850	855	860
Leu Ser Phe Gln Val	Glu Ala Lys Arg Ile	Arg Gln Lys Ala Asp Ser
865	870	875
Leu Ser Asn Leu Val	Thr Arg Gln Thr Asp	Ala Phe Thr Arg Val Arg
	885	890
Asn Asn Leu Gly Asn Trp	Glu Lys Glu Thr Arg	Gln Leu Leu Gln Thr
	900	905
Gly Lys Asp Arg Arg	Gln Thr Ser Asp	Gln Leu Leu Ser Arg Ala Asn
	915	920
Leu Ala Lys Asn Arg	Ala Gln Glu Ala Leu Ser	Met Gly Asn Ala Thr
	930	935
Phe Tyr Glu Val Glu	Asn Ile Leu Lys Asn	Leu Arg Glu Phe Asp Leu
	945	950
Gln Val Glu Asp Arg	Lys Ala Glu Ala Glu	Glu Ala Met Lys Arg Leu
	965	970
Ser Ser Ile Ser	Gln Lys Val Ala Asp	Ala Ser Asp Lys Thr Gln Gln
	980	985
Ala Glu Thr Ala	Leu Gly Ser Ala Thr	Ala Asp Thr Gln Arg Ala Lys
	995	1000
Asn Ala Ala Arg	Glu Ala Leu Glu Ile	Ser Ser Glu Ile Glu Leu Glu
	1010	1015
Ile Gly Ser Leu	Asn Leu Glu Ala Asn	Val Thr Ala Asp Gly Ala Leu
	1025	1030
Ala Met Glu Lys	Gly Thr Ala Thr Leu	Lys Ser Glu Met Arg Glu Met
	1045	1050
Ile Glu Leu Ala	Arg Lys Glu Leu Glu	Phe Asp Thr Asp Lys Asp Thr
	1060	1065
Val Gln Leu Val	Ile Thr Glu Ala Gln	Gln Ala Asp Ala Arg Ala Thr
	1075	1080
Ser Ala Gly Val	Thr Ile Gln Asp Thr	Leu Asn Thr Leu Asp Gly Ile
	1090	1095
Leu His Leu Ile	Asp Gln Pro Gly Ser	Val Asp Glu Glu Gly Met Met
	1105	1110
Leu Leu Glu Gln	Gly Leu Phe Gln Ala	Lys Thr Gln Ile Asn Ser Arg
	1125	1130
Leu Arg Pro Leu	Met Ser Asp Leu Glu	Arg Val Arg Arg Gln Arg
	1140	1145
Asn His Leu His	Leu Leu Glu Thr Ser	Ile Asp Gly Ile Leu Ala Asp
	1155	1160
Val Lys Asn Leu	Glu Asn Ile Arg Asp	Asn Leu Pro Pro Gly Cys Tyr
	1170	1175
Asn Thr Gln Ala	Leu Glu Gln Gln	
	1185	1190